Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method ~~of searching for a match for a query string, that represents an audio fragment, in a melody database; the method including~~ comprising:

decomposing ~~the~~ a query string that corresponds to an encoding of an audio fragment into a sequence of a plurality of query sub-strings;

~~for each sub-string,~~ independently searching ~~the~~ a melody database for at least a respective closest match for ~~the sub-string~~ each sub-string of the plurality of query sub-strings; and

in dependence on ~~the~~ search results for the respective sub-strings, determining at least a closest match for the query string.

2. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 1, wherein ~~the step of~~ decomposing the query string includes decomposing the query string into sub-strings that each substantially correspond to a phrase of a melody.

3. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 1, including enabling a user to input the query string ~~mixing a plurality of query input modalities~~.

4. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 3, wherein ~~at least one of the query input modalities is~~ the query string includes a plurality of query input modalities that includes at least one of: humming, singing, whistling, tapping, clapping, percussive vocal sounds.

5. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 3, wherein the query string includes a plurality of query input modalities and a change in query input modality substantially coincides with a sub-string boundary.

6. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 1, wherein ~~the step of~~ decomposing the query string includes:

estimating how many (Ns) sub-strings are present in the query string;

dividing the query string in Ns sequential sub-strings; each sub-string being associated with a respective centroid that represents the sub-string;

iteratively:

for each centroid, determining a respective centroid value in dependence on the ~~corresponding~~ sub-string associated with the respective centroid; and

determining, for each of the sub-strings, corresponding sub-string boundaries by minimizing a total distance measure between each of the centroids and ~~its corresponding~~ the sub-string associated with the respective centroid;

until a predetermined convergence criterion is met.

7. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim ~~2~~ 6, wherein ~~the step of~~ estimating how many (Ns) sub-strings are present in the query string includes dividing a duration of the audio fragment by an average duration of a phrase.

8. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 5, wherein ~~the step of~~ decomposing the query string includes retrieving for each of the input modalities a respective classification criterion and ~~using a classification algorithm for based on the classification criteria~~ detecting ~~a~~ the change in query input modality based on the classification criteria.

9. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 3, including constraining a ~~substring~~ sub-string to fall within two successive changes in query input modality.

10. (Currently amended) ~~A method of searching for a query string as claimed in~~ The method of claim 1, wherein ~~the step of~~ searching for each sub-string in the database includes generating for the sub-string an N-best list (N >=2) of the N most closest corresponding parts in the database with a corresponding measure of resemblance; and performing the determining of the at least closest match for the query string based on the measures of resemblance of the N-best lists of the sub-strings.

11. (Currently amended) A computer media that includes a computer program product operative to cause a processor to ~~execute the steps of the method as claimed in claim 1~~:

decompose a query string that corresponds to an encoding of an audio fragment into a sequence of a plurality of query sub-strings;

independently search a melody database for at least a respective closest match for each sub-string of the plurality of query sub-strings; and

in dependence on the search results for the respective sub-strings, determine at least a closest match for the query string.

12. (Currently amended) A system ~~for searching for a query string, that represents an audio fragment, in a melody database; the system including~~ comprising:

an input ~~(122, 132)~~ for receiving ~~the~~ a query string that corresponds to an encoding of an audio fragment from a user;

a melody database ~~(114)~~ for storing respective representations of plurality of audio fragments;

at least one processor ~~(116) for, under control of a program,~~ that is configured to:

~~- decomposing (117)~~ decompose the query string into a sequence of a plurality of query sub-strings;

~~- for each sub-string, independently searching (118)~~ search the database for at least a respective closest match for ~~the~~ each sub-string of the plurality of query sub-strings; and

~~- in dependence on the search results for the respective sub-strings, determining (119)~~ determine at least a closest match for the query string based on the closest matches for the plurality of query sub-strings.

13. (New) The system of claim 12, wherein each sub-string substantially corresponds to a phrase of a melody.

14. (New) The system of claim 12, wherein the at least one processor is configured to enable a user to input the query string.

15. (New) The system of claim 14, wherein the query string includes at least one of a plurality of query input modalities that includes at least one of: humming, singing, whistling, tapping, clapping, and percussive vocal sounds.

16. (New) The system of claim 14, wherein the query string includes a plurality of query input modalities, and a change in query input modality substantially coincides with a sub-string boundary.

17. (New) The system of claim 16, wherein the processor is configured to decompose the query string by:

retrieving for each of the input modalities a respective classification criterion and

detecting the change in query input modality based on the classification criteria.

18. (New) The system of claim 12, wherein the processor is configured to decompose the query string by:

estimating how many (Ns) sub-strings are present in the query string;

dividing the query string in Ns sequential sub-strings; each sub-string being associated with a respective centroid that represents the sub-string;

iteratively:

for each centroid, determining a respective centroid value in dependence on the sub-string associated with the respective centroid; and

determining, for each of the sub-strings, corresponding sub-string boundaries by minimizing a total distance measure between each of the centroids and the sub-string associated with the respective centroid;

until a predetermined convergence criterion is met.

19. (New) The system of claim 18, wherein estimating how many (Ns) sub-strings are present in the query string includes dividing a duration of the audio fragment by an average duration of a phrase.

20. (New) The system of claim 12 wherein the at least one processor is configured to generate for each sub-string an N-best list (N >=2) of the N closest corresponding parts in the database with a corresponding measure of resemblance, and determine the at least closest match for the query string based on the measures of resemblance of the N-best lists of the sub-strings.